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REMARKS

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicants assert that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

Status of Claims

Claims 1-11 are pending in the application. Claims 12-17 have been withdrawn from consideration. Claims 1-11 have been rejected. Claims 6 and 11 are currently being voluntarily cancelled by the applicants.

CLAIM REJECTIONS

35 U.S.C. § 112 Rejections

In the Office Action, the Examiner rejected claims 1-11 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically:

a. The Examiner rejected pending independent claim 1 under 35 U.S.C. § 112, second paragraph, due to a perceived conflict between claim limitations and portions of the specifications. The Applicants respectfully traverse this rejection. However, in the interest of expediting the prosecution of the present application has made clarifying amendments.

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- b. The Examiner rejected pending independent claim 1 under 35 U.S.C. § 112, second paragraph, as being unclear whether "the cells" recited in line 5 of the claim refers to the adjacent cells or to the whole array. Applicants have voluntarily amended pending independent claim 1 to read: "of the adjacent cells", thereby eliminating any unclarity which may have previously existed. Accordingly, Applicants respectfully request the withdrawel of the 112 rejection of pending independent claim 1 on these grounds.
- c. The Examiner rejected pending claim 2 under 35 U.S.C. § 112, second paragraph, as being unclear whether "a sense amplifier" recited in line 2 of the claim refers to the "common sense amplifier" recited in pending independent claim 1 line 3 or to another sense amplifier. Applicants have voluntarily amended pending claim 2 to read: "coupling said sense amplifier", thereby eliminating any unclarity which may have previously existed. Accordingly, Applicants respectfully request the withdrawel of the 112 rejection of pending claim 2 on these grounds.
- d. The Examiner rejected pending claims 6 and 11 under 35 U.S.C § 112, second paragraph, as being inconsistent with the subject matter claimed. Applicants respectfully traverse these rejections, however, in the interest of expediting the prosecution of the present application, Applicants have voluntarily cancelled pending claims 6 and 11, rendering the 112 rejection of these claims moot.

35 U.S.C. § 103 Rejections

In the Office Action, the Examiner rejected claims 1-5, 7-8 and 10 under 35 U.S.C. § 103(a), as being unpatentable over Thewes et al. (US Patent No. 5,831,892)(hereby: "Thewes"), and claim 9 under 35 U.S.C. § 103(a), as being unpatentable over Thewes in view of Maayan et al. (US Patent No. 6,975,536) (hereby: "Maayan").

Applicants respectfully traverse these rejections and assert that Thewes neither teaches nor suggests nor even mentions all of the limitations recited in pending independent claim 1. Namely, the limitations of: "...including a common sense amplifier, wherein sensing includes applying a first voltage to a common word line and a substantially similar

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voltage to source side bitlines of the <u>adjacent</u> cells", is neither taught nor suggested in the cited reference. Actually, the Thewes reference makes no mention of a sense amplifier whatsoever, which is understandable, as it does not teach sensing current, rather teaching the sensing of potential. Applicants respectfully assert that sensing current, as recited in pending independent claim 1, is patentably distinct from sensing potential, as taught by the cited reference. Furthermore, the cited reference does not teach or suggest applying "a substantially similar voltage", as recited in pending independent claim 1, and actually teaches away from the claimed limitation by specifically teaching applying <u>different</u> voltages to adjacent memory cells.

More specifically, pending independent claim 1 recites:

"1. A method of reading data in a virtual ground array of memory cells comprising: sensing substantially simultaneously a state of adjacent memory cells through at least a partially shared sensing path including a common sense amplifier, wherein sensing includes applying a first voltage to a common word line and a substantially similar voltage to bitlines on opposite sides of the adjacent cells."

Whereas, the cited reference teaches:

"The source terminals are applied to one of two potentials that differ from one another. Depending upon which of the field effect transistors is conductive upon selection of the pertinent word line, different resultant potentials are obtained on the bit line. Such potentials are then converted in the evaluation circuit into binary signals that represent the read information." (Thewes, Abstract); and

"The source terminals are applied to one of two <u>potentials</u> which <u>differ from each</u> other. Depending on which of the two field effect transistors is conductive upon selection of the pertinent word line, <u>different potentials are obtained</u> on the bit line. Such <u>potentials are then converted</u> in the evaluation circuit into binary signals that represent the read information." (Thewes, Summary of the Invention, lines 55-62)

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As can be clearly seen from an adequate reading of the above excerpts from the cited reference, in view of pending independent claim 1, the cited reference neither teaches, suggests nor even mentions all of the limitations recited in pending independent claim 1. The cited reference makes no mention whatsoever of a sense amplifier, as recited in pending independent claim 1. Applicants respectfully submit that they have searched the entire reference and have not found the term "sense amplifier", or any equivelant thereof, mentioned even once in the reference. Applicants respectfully assert that this lacking is understandable in view of the fundamental, and patentably distinct, difference between the teachings of the cited reference and the limitations recited in pending independent claim 1. Namely, that the cited reference teaches evaluating bit-line potentials whereas, pending independent claim 1 recites sensing current flows. Applicants are genuinely puzzled how this fundamental difference has been overlooked by the Examiner. The Examiner's apparent inference of a "sense amplifier" into the cited reference, not only lacks any basis in the text, as shown, but is actually taught away from in the cited reference, that specifically teaches evaluating potentials.

Moreover, pending independent claim 1 recites: "applying a first voltage to a common word line and a substantially similar voltage to source side bitlines", whereas, the cited reference teaches: "applied to one of two potentials that differ from one another". Clearly, applying substantially similar voltage, as recited in pending independent claim 1, is patentably distinct from applying potentials that differ from one another, as taught by the cited reference. Applicants respectfully traverse the Examiner's contention that it would have been obvious to one with ordinary skill in the art to apply substantially similar voltage, as the cited reference specifically teaches away from this limitation, and specifically teaches applying different potential. It is a long standing principle that an obviousness type rejection cannot be maintained when the cited reference teaches away from such a modification of the reference (See KSR Int'1 Co. v.Teleflex, Inc., 127 S. Ct. 1727, 1742 (2007) "[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious."). In other words, it cannot be considered obvious to one of ordinary skill in the art to try to apply similar voltages when the reference specifically teaches applying different voltages.

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Accordingly, Applicants respectfully assert that pending independent claim 1, and all claims dependent upon it, are proper under 35 USC 103 and request reconsideration and withdrawal of the rejections of pending claims 1-5 and 7-10.

In view of the foregoing amendments and remarks, all the pending claims are considered to be allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned Attorney of Record. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to contact the undersigned Attorney of Record.

Please charge any fees associated with this paper to deposit account No. 50-3400.

Respectfully submitted,

Vladimir Sherman

Attorney for Applicant(s)

Registration No. 43,116

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